

PROSPERO International prospective register of systematic reviews

Nutrition prioritisation: three inter-dependent (mapping, methodology, and ethics) systematic review outputs

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Review question(s)

This review includes three inter-dependent systematic review outputs. The review questions are presented for each output.

Mapping Review (MAR): To systematically identify priority setting exercises (e.g. in research, policy, and implementation science) in the nutrition field.

METHodological Review (MER):

Short-term objective: To systematically review and map methodological tools used in priority setting for nutrition.

METHodological Review (MER):

Long-term objective: To perform a gap-analysis to identify the (mis)match between the reality of how priorities are being set in countries (practice) versus the developed matrix of methodological tools (theory). Based on this analysis, the resultant matrix could underpin a guide to decide on when to best use which prioritisation technique.

ETHical Review (ETR): To systematically evaluate priority setting exercises in nutrition research to develop an ethical framework using the best-fit framework. An initial framework will be populated deductively and refined and expanded inductively from identified studies. Additionally this framework will be further validated through stakeholder consultation. The framework could serve as guidance regarding values to be used when setting research priorities in nutrition.

Searches

The following electronic databases will be searched: MEDLINE (PubMed; <http://www.ncbi.nlm.nih.gov/pubmed>), EMBASE (<http://www.embase.com>), Web of Science (<http://www.webofknowledge.com>), the Cochrane Library (<http://www.thecochranelibrary.com/>), and TRIP database (www.tripdatabase.com). The powerful full-text capability of Google Scholar will also be harnessed, through keywords and citation searches.

The initial search string will be developed in MEDLINE by using the Population, Intervention, Comparison and Outcome model (PICO), combining Population (Decision-making bodies in the nutrition field; keywords: diet, food, and nutrition), Intervention (Named Methods of Priority-Setting; keywords: priority, Delphi, agenda, consensus, voting), Comparison (Alternative Methods of Priority Setting), and Outcome (Compatibility of priorities to identified need, satisfaction of stakeholders, proportionality of priority setting exercise to magnitude of decision problem, methodology, ethics, etc.) terms. The search string will be further refined for use in the different databases. It will include both text words and thesaurus terms, which will be adapted for each of the databases searched. Searches will be conducted in July-August 2016. Additional eligible studies will be identified from the bibliographies of published reviews and included articles. The review will be limited to studies published in English, French, Spanish, Dutch, and German.

Considering the methodological objectives of the reviews, relying exclusively on peer-reviewed literature could omit potentially relevant work as it is likely that some priority exercises are never formally published (e.g. government reports). To achieve a comprehensive review, we consider grey literature as an important element of our mapping review. A grey literature search plan will be developed and will incorporate three different searching approaches adapted from Godin et al., 2015:

(1) grey literature databases (e.g. Grey Literature Report: <http://www.greylit.org/>; OpenGrey: <http://www.opengrey.eu/>),

(2) targeted websites (e.g. Scaling Up Nutrition (SUN): www.scalingupnutrition.org; Thousand days: www.thousanddays.org; COHRED: www.cohred.org; CHNRI: www.chnri.org/publications.php; IFPRI: www.ifpri.org/search?keyword=priorities; USDA Interagency Committee on Human Nutrition: www.fnrc.nal.usda.gov/surveys-reports-and-research/interagency-committee-human-nutrition-research); SUNRAY: www.sunrayafrica.co.za; JPI a healthy diet for a healthy life: <http://www.healthydietforhealthylife.eu/>; Sackler Institute <http://www.nutritionresearchagenda.org/>, AFRESH: www.afresh-project.eu; nutrition donor websites) and

(3) consultation with contact experts (could identify other relevant websites). These complementary strategies will be used to minimize the risk of omitting relevant sources such as e.g. government reports (national nutrition priority setting exercises).

For the MER and ETR, citation searching will be done, using the original list of candidate tools and methodologies applicable to the objectives of each review output.

Reference:

Godin et al. Applying systematic review search methods to the grey literature: a case study examining guidelines for school-based breakfast programs in Canada Systematic Reviews, 2015.

Types of study to be included

MAR: There are no restrictions on the types of study design eligible for inclusion. Grey literature will be searched.

MER + ETR: The type of study included in this review will be determined by the quality and quantity of literature retrieved from the results of the MAR.

Condition or domain being studied

MAR: This mapping review aims to systematically identify priority setting exercises at international, national, regional and/or sub-regional levels (e.g. in research, policy, and implementation science) in the nutrition field.

MER:

Short-term objective: We aim to systematically review and map methodological tools used in priority setting for nutrition.

Long-term objective: Perform a gap-analysis to identify the (mis)match between reality of how priorities are being set in countries (practice) versus the developed matrix of methodological tools (theory). Based on this analysis, a realistic matrix could serve as a guide to decide on when to best use which prioritisation technique.

ETR: We aim to systematically evaluate research priority setting exercises to develop an ethical framework using the best-fit framework. Additionally this framework will be further validated through stakeholder consultation. The framework could serve as guidance regarding values to be used when setting research priorities in nutrition.

Participants/ population

For all three review outputs, we will only include papers which involve decision-making bodies in the nutrition field. The decision-making body could be active in health/agriculture priority, but there needs to be a specific focus on nutrition priorities. Papers will be excluded when nutrition is not included in the remit of the decision-making body.

Intervention(s), exposure(s)

MAR: Named methods of priority-setting in nutrition are defined as those approaches that aim to set priorities in for example research, implementation programs, policies, funding agencies. Examples of such priority methods and/or approaches include expert opinion, workshops, Delphi round, voting, ranking, agenda setting, cost-effectiveness, etc. Such approaches could also form part of a wider methodology or health priority setting, but the approach or method needs to be applied to nutrition. It could be a part of a health/agriculture priority, but needs to include a specific focus on nutrition. Papers will be excluded when there is no nutrition focus in the priority setting.

MER: The specific domain focus of this review (research, implementation, funding, etc.) will depend on the results of the MAR.

ETR: This review will focus on all nutrition priority-setting exercises applied to research.

Comparator(s)/ control

For all three review outputs: Alternative Methods of Priority Setting

Context

Priority setting exercises at international, national, regional and/or sub-regional levels (e.g. in research, policy, and implementation science) in the nutrition field will be included. Priority setting exercises at institutional level, e.g. a hospital will be excluded.

For the grey literature we will include reports and documents that are available in French, German, Spanish, English and Dutch. We will only include final version of documents, i.e. excluding previous versions of documents, drafts, or when they have been replaced. Documents need to be applied to nutrition.

Outcome(s)

Primary outcomes

The main primary outcome of the MAR will be the identification of important characteristics of priority setting tools and processes, including methodologies used in priority setting exercises (see MER) and values applied to research priority setting exercises (see ETR). The output of the MAR will be used to create a checklist to be used to make a preliminary descriptive assessment of the features of each methodology tool/process (see MER). Further exploration of the checklist will be used to determine whether the presence or absence of certain features or characteristics are associated with better or worse outcomes from the prioritization process. Components of each process will be mapped within a matrix or "truth table". We will also use the output of the MAR for research priority setting exercises to identify values used in research priority setting exercises to develop and validate an ethical framework to be used in priority setting. The output of the MAR will be a set of values to be used as basis for the ethical framework to be developed and considered when priorities in nutrition research are being set (see ETR).

Not Applicable

Secondary outcomes

Secondary outcomes for the MAR are: acceptability of the prioritisation methods/process to stakeholders and satisfaction with the process.

The secondary outcomes that will be included in the MER and ETR will be determined by the content of literature retrieved from the results of the MAR.

Not Applicable

Data extraction, (selection and coding)

First, the title and abstracts of the identified references (from the search strategy and from additional sources) will be screened to select relevant studies based on the inclusion criteria. If insufficient information is available from the title and abstract, the full text will be read. The full text of the selected studies will then be retrieved and read to determine whether the inclusion criteria are met. The selection process will be performed independently by 2 reviewers (DH and RV). Disagreement between reviewers will be resolved by discussion until a consensus is reached. In cases of disagreement, a third reviewer will be consulted (MH).

For the grey literature search, as abstracts are often unavailable in grey literature documents, items' abstracts, executive summaries, or table of contents (whichever is available) will be screened in the initial stage. Full text screening will occur subsequently.

Data extraction of the following study characteristics will be performed by two reviewers (DH and RV): type of study, perspective of the study (nutrition-sensitive, nutrition-specific, part of healthy priorities), study setting (geographical: e.g. global, regional, national, sub-national, etc.), applied field (implementation, research, funding, economic, etc.), priority methodology (voting, Delphi, ranking, etc.), characteristics of priority setting (objective, who is represented, initiator, number of experts (invited vs included), target audience, date, focus, funding source, follow-up of the results of the exercise, end-users of the priority setting exercise, and theoretical framework of the exercise). Data extraction sheets will be pilot-tested on 4 papers before applying them to all included studies.

Study results and the information necessary to perform evidence synthesis will be extracted independently by two reviewers. Discrepancies will be identified and resolved through discussion until a consensus is reached. If necessary, a third reviewer will be consulted to obtain a final decision. If two articles present data from the same study, the results will be included only once in the tables and all the references linked to the original study will be noted. Missing data will be requested from study authors.

ETR: The selection process will be performed independently by 2 reviewers (DH and NB). In cases of disagreement, a third reviewer will be consulted (CL).

MER: The selection process will be performed independently by 2 reviewers (RV and AB). In cases of disagreement, a third reviewer will be consulted (MH).

Risk of bias (quality) assessment

Risk of bias assessment is not applicable to this review.

Strategy for data synthesis

We will provide a narrative synthesis of the findings from the included studies, structured around the data characteristics extracted. We will provide summaries of methodologies. There will be no scope for meta-analysis because of the nature of the studies and different outcomes.

Analysis of subgroups or subsets

This is a narrative synthesis and while subgroup analyses may be undertaken it is not possible to specify the groups in advance.

Dissemination plans

A paper will be submitted to a leading open access journal in this field. Furthermore, a one page summary report will be prepared and sent to lead organisations and researchers in nutrition (e.g. Scaling Up Nutrition).

Contact details for further information

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Organisational affiliation of the review

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www.itg.be

Review team

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Anticipated or actual start date

28 July 2016

Anticipated completion date

31 July 2017

Funding sources/sponsors

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The ETR is initiated and managed by Dana Hawwash, a PhD student from Ghent University, who has received a scholarship from Schlumberger Foundation's Faculty for the Future Program (www.fff.slb.com); Prof. C. Lachat (UGent, www.nutrition.ugent.be) and Prof. W. Pinxten (UHasselt, www.uhasselt.be).

Conflicts of interest

None known

Other registration details

The review and its PROSPERO registration number will be published on the EVIDENT website (www.evident-network.org)

Language

English

Country

England, Belgium

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

Ethical Review; Humans; Nutritional Status

Any other information

This review includes three inter-dependent systematic review outputs. Anticipated completion date is presented for each output: Mapping Review (MAR): December 31, 2016; Methodological Review (MER): July 1, 2017; Ethics Review (ETR): March 31, 2017. In addition, contact email of lead author will change: rverstraeten@itg.be (until December 31, 2016)

Stage of review

Ongoing

Date of registration in PROSPERO

01 August 2016

Date of publication of this revision

01 August 2016

Stage of review at time of this submission	Started	Completed
Preliminary searches	Yes	No
Piloting of the study selection process	No	No
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

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